



Failure to capitalize on sharing good news with romantic partners: Exploring positivity deficits of socially anxious people with self-reports, partner-reports, and behavioral observations



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ABSTRACT

Extending prior work on social anxiety and positivity deficits, we examined whether individual differences in social anxiety alter the ability to share and respond to the good news of romantic partners (i.e., capitalization support) and how this influences romantic relationship satisfaction and commitment. In this study of 174 heterosexual couples (average age of 21.5 with 58.3% identifying as Caucasian), greater social anxiety was associated with the provision and receipt of less supportive responses to shared positive events as measured by trait questionnaires, partner reports, and behavioral observations in the laboratory. In longitudinal analyses, individuals in romantic relationships with socially anxious partners who experienced inadequate capitalization support were more likely to terminate their relationship and report a decline in relationship quality six months later. As evidence of construct specificity, social anxiety effects were independent of depressive symptoms. Taken together, social anxiety influenced a person's ability to receive and provide support for shared positive events; these deficits had adverse romantic consequences. Researchers and clinicians may better understand social anxiety by exploring a wider range of interpersonal contexts and positive constructs. The addition of capitalization support to the social anxiety literature offers new insights into interpersonal approaches and treatments.

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anxiety may limit access to these rewards. Interpersonal difficulties are central to theoretical models of social anxiety (Clark & Wells, 1995; Gilbert, 2001; Leary, 2000). According to these models, socially anxious people become anxious prior to and during social interactions because they believe their behavior or perceived defects will prompt others to reject them. To prevent undesirable social outcomes, socially anxious people avoid social contact, become vigilant to social threats, and deflect attention when in social situations (Clark & Wells, 1995). Although these efforts may reduce the likelihood of rejection, they also lead to rigid, constrained social behavior (Alden & Taylor, 2004) and deplete the attentional resources and stamina needed to engage in and extract rewards from pleasurable social interactions (Heimberg, Brozovich,

anxiety interferes with the potential rewards of social interactions by either depriving an individual of those social encounters or disturbing the social process.

Few occasions are more rewarding than the opportunity to share a personally meaningful experience with a close friend or romantic partner. Sharing these experiences in hopes of getting a receptive, supportive audience is called a *capitalization attempt* (Langston, 1994). The resulting support following disclosure (i.e., capitalization support) can be construed as a relationship maintenance strategy. Communicating personal information to another person and having them respond to these disclosures is essential to developing intimacy with another person (Reis & Shaver, 1988) and generating satisfaction in close relationships (Collins & Miller, 1994). Previously, researchers focused on the importance of supportiveness during difficult times, however, recent work suggests that capitalization support is an even better predictor of well-being and relationship satisfaction, commitment, and longevity (Gable, Gonzaga, & Strachman, 2006; Gable, Reis, Impett, & Asher, 2004).

When people positively respond to capitalization attempts, they signal that they are invested in their partner's well-being (Gable &

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Reis, 2010). Positive behavioral responses to capitalization attempts are characterized as being active (interested and engaged in what one's partner has to say) and constructive (enthusiastic and encouraging elaboration). When a partner listens attentively with a curious attitude, the person who disclosed the event experiences more intense, enduring positive emotions; these positive emotions are also attributed to the relationship partner and the relationship as a whole (Gable et al., 2004, 2006; Reis et al., 2010). In contrast, the quality of a relationship is compromised when people respond to shared positive events in a style that is passive (attentive but without attempts to ask for details or extend the conversation) or destructive (pointing out the downsides of an event, thus undermining its positive nature). Passive and destructive response styles convey disinterest in what is important to romantic partners and are linked to greater conflict and less commitment, satisfaction, intimacy, and trust within a relationship (Gable et al., 2004). In summary, romantic relationships develop and mature through small positive interactions such as capitalization. We extended this work by exploring individual differences that moderate the presence and benefits of healthy, supportive responses to capitalization attempts. Specifically, we explored whether individual differences in social anxiety disturb the capitalization process in romantic relationships.

Social anxiety and the quality of romantic relationships

Research on the romantic relationships of socially anxious people has been mixed. Socially anxious people struggle to initiate romantic relationships (Schneier et al., 1994) and enter into lasting relationships such as marriage (Lampe, Slade, Issakidis, & Andrews, 2003). When in a romantic relationship, socially anxious people tend to describe it as less intimate and supportive (Cuming & Rapee, 2010; Sparrevohn & Rapee, 2009), recount less pleasurable sexual activity (Kashdan, Adams, et al., 2011), and report greater conflict avoidance, less emotion expression, and fewer self-disclosures (e.g., Davila & Beck, 2002). These findings might appear face valid given the social difficulties experienced by the socially anxious, yet other researchers found no association between social anxiety and romantic relationship quality (Beck, Davila, Farrow, & Grant, 2006; Wenzel, Graff-Dolezal, Macho, & Brendel, 2005), and some researchers found a small inverse association (e.g., Cuming & Rapee, 2010; Filsinger & Wilson, 1983). These inconsistencies might reflect methodological differences such as sampling or measurement. Our collective knowledge of social anxiety and romantic relationships comes predominantly from cross-sectional studies where social anxiety symptoms and romantic relationship functioning were measured during a single assessment with a single informant—an approach that cannot capture how psychological processes affect each person in the relationship over time (McNulty & Fincham, 2012).

To date, only three published studies of social anxiety have collected information from both romantic partners in a couple and all of them were limited to a cross-sectional design. One study found a negative association between social anxiety and marital adjustment — but only for socially anxious spouses; there was no evidence for partner effects (Filsinger & Wilson, 1983). In two additional studies, researchers examined the behaviors of socially anxious people during laboratory interactions. Wenzel and colleagues (2005) found that socially anxious individuals showed less frequent positive behaviors and more extreme negative behaviors during conversations manipulated to be on positive, negative, or neutral topics.

Studying socially anxious women in romantic relationships, Beck et al. (2006) found that social anxiety has no direct effect on the frequency of positive or negative behaviors during an interaction between romantic partners. These researchers did find that

greater social anxiety led to greater distress when disclosing difficult life events, but only when their partners displayed a high frequency of positive, supportive behaviors. Due to the cross-sectional nature design, it remains unclear whether partners were more supportive of socially anxious women when they displayed distress or if receipt of supportive responses exacerbated the distress of socially anxious women.

With mixed findings, there remains some doubt about the relevance of social anxiety to relationship quality. Notably, prior studies failed to address how the social anxiety of one romantic partner influences the behaviors and cognitions of the other partner. To understand social anxiety, similar to any other personality dimension, we need to move from an individualistic to interpersonal perspective in theory, methodology, and data analytic strategies (Reis, Collins, & Berscheid, 2000). A truly interpersonal approach requires consideration of dynamic influences between partners, and cannot be addressed with surveys or information processing tasks given to one person in a dyad (Coyne, 1999; Kenny, Kashy, & Cook, 2006). Prior social anxiety studies have narrowly focused on social support for difficult life events whereas research on capitalization support has yet to address vital individual differences that moderate the presence and benefits of this process.

Social anxiety and positivity deficits

Relationship researchers have shown that positive behaviors are equally or of greater importance to relationship satisfaction and longevity than negative behaviors (Algoe, Gable, & Maisel, 2010; Aron & Aron, 1997; Gable et al., 2006). Socially anxious people are at particular risk of positivity deficits. Studies on cognitive processing and neural networks have shown that socially anxious people are overly sensitive to negative information and also less reactive to positive social cues such as happy faces (Quadflieg, Wendt, Mohr, Miltner, & Straube, 2007; Silvia, Allan, Beauchamp, Maschauer, & Workman, 2006), and lack a natural approach orientation under conditions of low threat (Hirsch & Matthews, 2000). Compared to a healthy comparison group, socially anxious people spend less time paying attention to positive stimuli, disengage quicker, and persevere longer on negative stimuli (Chen, Clarke, MacLeod, & Guastella, 2012). Collectively, social anxiety symptoms are linked to a wide range of positivity deficits that can be expected to interfere with the maintenance of healthy, close relationships.

Socially anxious people tend to underestimate their performance and denigrate themselves in social situations, often viewing themselves more negatively and less positively than how others perceive them (Christensen, Stein, & Means-Christensen, 2003; Kashdan & Savostyanova, 2011; Wilson & Rapee, 2005). Upon receiving positive feedback from others, socially anxious people are less likely to enjoy this experience —due to worries about being unable to reach new, higher social standards in the future (e.g., Alden & Wallace, 1995; Weeks, Heimberg, & Rodebaugh, 2008). These information processing and motivational deficits might account for why socially anxious people are susceptible to less frequent, intense, and enduring positive emotions and social events (Kashdan & Steger, 2006; Kashdan et al., 2013).

Social anxiety and capitalization support

To extend work on social anxiety in a relational context, we considered whether dysfunctional capitalization support helps to explain when social anxiety is related to romantic relationship problems. Given the emotional and interpersonal features of social anxiety, socially anxious people may be at particular risk of dysfunctional capitalization support within their close relationships. One possibility is that socially anxious people may be less

responsive to received capitalization support. First, disclosing positive events draws unwanted attention which is uncomfortable. To avoid this discomfort, socially anxious people may discount or diminish the importance of positive events (Weeks, 2010). By diminishing positive events, socially anxious people might inhibit capitalization opportunities. Second, negative interpretation biases tend to dominate in most social anxiety theories (Clark & Wells, 1995; Hofmann, 2007; Leary, 2000). Socially anxious people are less sensitive to positive social information and more likely to interpret ambiguous social events as negative (Stopa & Clark, 2000). After disclosing a positive event to someone else, socially anxious people can be expected to interpret their partners' responses as less active and constructive than intended. Thus, we think that socially anxious people might be less likely to perceive their partners as providing capitalization support.

A second possible way social anxiety could impact the capitalization process is by being less likely to provide positive capitalization support to their partners. Socially anxious people tend to suppress the expression of positive emotions and be less responsive to social reward cues (Farmer & Kashdan, 2012; Heimberg et al., 2010; Turk, Heimberg, Luterek, Mennin, & Fresco, 2005). Other studies found that socially anxious people are less likely to reciprocate smiles and more likely to act in an unassertive, submissive manner (Hopko, McNeil, Zvolensky, & Eifert, 2001; Rodebaugh, Gianoli, Turkheimer, & Oltmanns, 2010; Russell et al., 2011; Weeks, Heimberg, & Reinhardt, 2011). Based on these findings, we suspect that socially anxious people respond less enthusiastically to other people's positive event disclosures, leading to a lower likelihood that partners view them as supportive of capitalization attempts.

In addition to examining the association between social anxiety and capitalization support, we wanted to test whether social anxiety disrupts the relational benefits associated with capitalization support. That is, while capitalization support might be beneficial to relationship satisfaction and commitment, this process might be disrupted by the presence of a socially anxious romantic partner. By examining the synergy between these variables, our study can move beyond main effect models of whether, and how, social anxiety is related to romantic relationship problems (e.g., Beck et al., 2006; Wenzel et al., 2005).

The present research

In this study, we tested the theoretical assumption that social anxiety is a vital individual difference factor to the occurrence of capitalization support, and that the combination of high social anxiety and inadequate capitalization support is a toxic combination leading to declines in romantic relationship quality and longevity. We hypothesized that when socially anxious people disclose positive events, they will be more likely to 1) perceive their partners as being less responsive and 2) actually receive less support from partners (a test of whether any dysfunction is not "just in their head"). After hearing their partner's share positive events, we expected that socially anxious people would be more likely to 1) perceive themselves as less constructive and 2) be rated by partners as less supportive. After testing whether social anxiety disrupts the capitalization process, we conducted a longitudinal examination of how social anxiety and responses to positive event disclosures predict relationship functioning. We expected capitalization support to predict greater relationship satisfaction and commitment over time and social anxiety would moderate these relational benefits. We hypothesized that being in a romantic relationship with a socially anxious person, and perceiving a relative absence of capitalization support from them, would predict a greater probability of break-ups and greater declines in relationship quality

over time. The present study is one of the first longitudinal examinations of social anxiety in romantic relationships and as a result, we explored the direction of the hypothesized social anxiety and capitalization support effects.

The co-occurrence of social anxiety and depressive symptoms are the norm rather than the exception, and both emotional disturbances are associated with diminished positive experiences, infrequent positive events, and psychological (in)flexibility (Kashdan, 2007; Rottenberg, 2005). To address construct specificity, we examined depressive symptoms as an alternative explanation for any social anxiety effects.

Method

Participants

Our sample consisted of 174 heterosexual dating couples recruited from a Mid-Atlantic university and its surrounding community. Participants were recruited via flyers and online advertisements. Both partners had to participate in the study and couples needed to be dating for at least three months. The mean relationship length was 21.7 months ($SD = 19.4$); 57.5% of couples were together for at least one year and 19.1% were engaged or married. The sample had a mean participant age of 21.5 years ($SD = 4.5$) and an ethnic composition of 58.3% Caucasian, 14.7% Asian, 10.6% Latino/Hispanic, 5.2% Middle Eastern, 4.3% African American, 0.6% Native American, and 6.3% other. We oversampled for socially anxious people with a subset of advertisements targeting people who are in romantic relationships and experience intense anxiety in social situations. Couples were given research credit for psychology classes and if a partner was not a student, received financial compensation.

Procedure

Participants attended two 1.5 h laboratory sessions. Upon their arrival, couples provided informed consent and were then separated into private rooms to complete informed consent, demographic, personality, and baseline questionnaires. Descriptive data and internal reliability for questionnaires are reported in Table 1.

Baseline questionnaires

Social Interaction Anxiety Scale

This 20-item scale (Mattick & Clarke, 1998) measured fear and avoidance of social interactions due to concerns about being scrutinized by other people; our primary measure of social anxiety. Participants responded to items using a 5-point Likert scale ranging from 0 (*not at all characteristic of me*) to 4 (*extremely characteristic of me*). This scale has been shown to have strong reliability and validity across clinical, community, and student samples (Heimberg, Mueller, Holt, & Liebowitz, 1992; Mattick and Clarke, 1998).

Receiving support

The 12-item Perceived Responses to Capitalization Attempts Scale (PRCA; Gable et al., 2004) measures perceptions of how partners generally respond to shared positive events. Participants responded to items using a 7-point scale ranging from 1 (*not at all true*) to 7 (*very true*). Each item began with the stem, "When I tell my partner about something good in my life..." followed by responses categorized as active-constructive (e.g., My partner usually reacts to my good fortune enthusiastically), passive-constructive (e.g., My partner says little, but I know he/she is happy for me), active-destructive (e.g., My partner reminds me that most good

Table 1

Means, standard deviations, and internal consistency coefficients for, and zero-order relations between variables.

	1	2	3	4	5	6	7	8
1. SIAS	—	-.14*	-.15*	-.06	-.01	-.12*	-.09	.43**
2. Receiving support	—	—	.20**	.35**	.28**	.17*	.21**	-.13
3. Providing support	—	—	—	.27**	.29**	.16**	.16**	-.18**
4. T1 Satisfaction	—	—	—	—	.65**	.33**	.31**	-.27**
5. T1 Commitment	—	—	—	—	—	.30**	.47**	-.13*
6. T2 Satisfaction	—	—	—	—	—	—	.79**	-.15*
7. T2 Commitment	—	—	—	—	—	—	—	-.05
8. BDI-II	—	—	—	—	—	—	—	—
<i>M</i>	17.58	2.50	5.93	7.63	7.78	6.80	7.34	8.41
<i>SD</i>	11.33	1.99	.87	1.49	1.44	2.53	2.06	6.48
α	.91	.84	.72	.93	.84	.98	.91	.83

Notes. * $p < .05$. ** $p < .01$. Except for the SIAS and BDI-II (where normative data are available), we used mean item scores. T1 = Baseline; T2 = 6-month follow-up; SIAS = Social Interaction Anxiety Scale; Receiving support = PRCA or Trait Perceived Responses to Capitalization Attempts Scale; Providing support = Trait perceived provision of capitalization support.

things have their bad aspects as well), or passive-destructive (e.g., My partner often seems disinterested). Prior research has shown that active-constructive responses correlate positively with healthy relationship outcomes, whereas passive and destructive responses correlate negatively with healthy relational outcomes (Gable et al., 2004, 2006; Reis et al., 2010). Active-constructive responses represent capitalization support. Using an algorithm by prior researchers (Gable et al., 2004, 2006; Reis et al., 2010), a single score was created with greater scores reflective of more capitalization support and less passive or destructive responding (by subtracting the mean of passive-constructive, active-destructive, and passive-destructive items from active-constructive items). Composite scores ranged from -5 to 6 for women and from -2 to 6 for men. A supportive response style was negatively correlated with passive and destructive response tendencies. The PRCA has been shown to be valid as evidenced by strong positive associations with observer ratings of responses to capitalization attempts (Gable et al., 2006) and positive correlations with perceived social support (Shorey & Lakey, 2011). As for validity, people who tend to receive supportive responses from their partner following positive event disclosures report greater personal well-being, relationship quality, and relationship longevity (Gable et al., 2004, 2006; Reis et al., 2010). Examinations of capitalization attempts in contexts such as peer and parent–child relationships led to similar findings such that supportive responding predicted greater well-being and relationship quality (Gable & Reis, 2010, for review). In the present study, we found that when sharing positive events, people who viewed their partner as supportive (PRCA) reported greater relationship satisfaction and commitment.

Providing support

This 3-item face-valid scale, created for this study, measures self-perceived provision of supportive responses following positive event disclosures by partners. Participants responded to items using a 7-point Likert scale ranging from 1 (*not at all true*) to 7 (*very true*). Items included: “Hearing about/responding to good things that happen to my partner makes me feel alive,” “I provide constructive responses to my partner to maintain our relationship,” “I enjoy hearing about and responding to good things that happen to my partner.” A single score was created such that higher scores reflected more supportive responsiveness. This scale and the PRCA scale capture how people view their own and their partners’ reactions to shared positive events, respectively. As for validity, in the present study, we found that the provision of support following positive event disclosures by partners was related to was related to greater relationship satisfaction and commitment.

Relationship quality

To measure satisfaction in and commitment to romantic relationships, we used two subscales of the *Relationship Investment Model Scale* (Rusbult, Martz, & Agnew, 1998). Satisfaction subscale items assess the degree of positive versus negative feelings and thoughts experienced in the relationship (5-items; e.g., My relationship is close to ideal). Commitment subscale items measure a person’s intent to remain in the relationship (7-items; e.g., I am oriented toward the long-term future of my relationship). Participants responded to items using a 9-point scale ranging from 1 (*not at all true/never true*) to 9 (*very true/true all of the time*). These scales have been shown to have strong convergent and discriminant validity as evidenced by large positive correlations with measures of marital adjustment and intimacy, and small associations with personality scales unrelated to social activity (e.g., Le & Agnew, 2003; Rusbult et al., 1998). Relationship satisfaction and commitment have been shown to differentially predict relationship outcomes (Bui, Peplau, & Hill, 1996; Impett, Beals, & Peplau, 2001).

Beck Depression Inventory-II

Severity of depressive symptoms was assessed using this 21-item questionnaire (Beck, Steer, & Brown, 1996). Participants responded to items using a 4-point Likert scale (from 0 to 4). In previous research, this measure demonstrated excellent reliability, validity, sensitivity to clinical intervention, and ability to differentiate people with and without mood disorder diagnoses (Beck et al., 1996; Sprinkle et al., 2002).

Laboratory experiment

After separately completing baseline measures, couples were reunited and seated together on a couch to complete social interaction tasks involving the disclosure of positive and negative life events. One small camera was set up 10 feet away to capture both partners, and a microphone was placed at head-level behind the partners to clearly capture their voices. Couples participated in three separate interactions; two occurring on their first session and one on their second session scheduled one week later. In the initial interaction, couples discussed their first romantic date for 5 min. Participants were given one goal: to have a conversation about how they remember their first date. We used this interaction to acclimate couples to the experimental room, procedures, and videotaping equipment. Couples were left alone until a timer signaled the end of the task.

Participants were then given a second interaction task in which they were asked to either share positive or negative events (counter-balanced across the first and second study appointments);

a design used by Gable et al. (2006). Before discussing positive events, partners received the following instructions from the experimenter:

Now I would like for the two of you to take some time and think about a positive event that you have experienced but have not yet shared with your partner. You are free to choose any event that comes to mind, such as getting a good grade, talking to a childhood friend, an important project at school or your job, etc. This event can be anything good (big or small) that has either happened recently or that you anticipate happening in the future. However, it must be something that has been on your mind lately and that you have not yet shared with your partner. You will take turns talking about your events and you will decide who goes first. When talking about your event, try to talk about it in as much detail as possible. When hearing about your partner's event you are free to talk as much or as little as you wish. In both situations, try to engage in a conversation that is as close as possible to a normal interaction between you. You will have 6 minutes on the timer to complete this task. I will come in after the timer goes off. Do you have any questions? Now who will be the first to share the event?

Before discussing negative events, partners received similar instructions but with a focus on sharing "a time when you were facing a particular problem, concern, or stressor and felt that you could have used your partner's care and support and, for any reason, he/she was not present." The order in which partners chose to share their positive event was not related to level of social anxiety, $\chi^2(1, N = 227) = 0.07, p > .05$, or gender, $\chi^2(1, N = 227) = 0.15, p > .05$.

After each interaction, couples independently completed questionnaires about their experience. Trained observers later coded the videotapes of positive event disclosures for particular behaviors. Consistent with prior work (Gable, 2006), behaviors and perceptions of support related to negative event disclosures were not examined as we did not expect that active and constructive responses in this context would be positively related to relationship outcomes and rather, could have a deleterious effect. While social support behavioral coding systems have been established (e.g., Collins & Feeney, 2000; Simpson, Rholes, & Nelligan, 1992), the primary focus of the present research was to understand the role of positivity deficits in social anxiety during positive event disclosures. Thus, a comparison of capitalization and social support behaviors extends beyond the scope of this paper.

Post-experiment self-report measures

After each videotaped interaction (sharing positive and negative events), partners completed a 10-item version of the 18-item Responsiveness Scale (Reis, 2003), as used in Gable et al. (2006). This measure assessed how people believed their partner responded to shared positive events by understanding, validating, and showing care for them. Each item began with the stem, "When I told my partner about the good event that happened to me..." followed by statements such as "My partner was responsive to my needs" and "My partner really listened to me." Participants made ratings using a 7-point Likert scale ranging from 1 (*not at all*) to 7 (*extremely*). Another set of questions focused on a self-assessment of responsiveness to partner's shared positive events, with each of 10 items beginning with the stem "When my partner told me about the good event that happened to him/her..." and an additional two items rating the valence and importance of the event that their partner shared with them. Thus, each person rated their provision and receipt of capitalization support. Adequate reliability and validity has been found in prior capitalization studies (e.g., Gable et al., 2006).

Coding of videotaped behavior

We developed a behavioral coding scheme to describe the quality of reactions people displayed in response to their partner sharing a positive event. Coding was circumscribed to the person who was listening, not the partner sharing their good news. All coders received prototype descriptions of the four types of partner responses:

- **Active-constructive** – Partner displays enthusiastic support for the event they are told about. He/she reacts in a positive manner and actively seeks additional information or absorbs information about the event (e.g., non-verbal cues of savoring or satisfaction). They can voice enthusiasm through inflection in their voice or the content of their comments. Their enthusiasm may also be apparent in their gestures and non-verbal behavior, such as Duchene or genuine smiles, laughter, giddiness, or intimate forms of touch. The partner may show genuine interest by asking questions about the event or actively exploring and searching for more information. This can be accomplished through statements that prolong the conversation and encourage the person to elaborate on their event. Key Element: enthusiasm and elaboration.
- **Passive-constructive** – The partner responds positively but does not actively contribute to the conversation or attempt to explore the topic in any depth. His/her behavior is primarily passive with subtle signs of support and approval. He/she might show approval or support by engaging in intimate touch, nodding in approval, making eye contact or smiling. He/she may make a perfunctory, positive comment on the event but does not actively explore the story being shared by asking questions. The partner seems attentive and interested in the event but may either remain quiet, or voice approval with simple phrases that do not intend to prolong the conversation. Key Element: quiet but attentive and/or interested.
- **Active-destructive** – The partner undermines the positive nature of the event by pointing out potential problems or downsides related to the event. He/she may minimize the event through questions or statements. Partner may also point out how the positive event might adversely affect them. Partner may also show disappointment through non-verbal behavior, such as displaying negative emotions through facial expressions that show disgust, disapproval, etc. He/she may also roll their eyes, nod in disapproval, or make negative behavioral gestures intended to mock or undermine the event. The inflection and non-verbal behavior do not have to be intense. The content of their statements and tone of their non-verbal expressions, posture, and other behaviors might be clear, calm, and direct in their negativity. Key Element: undermining or denying positive nature of event.
- **Passive-destructive** – Partner tends to ignore or fails to respond to the event. His/her behavior primarily reflects disinterest or inattentiveness. The partner may look away or be occupied with other objects (cell phone, etc). He/she may change the subject, simply remain quiet, or redirect the focus of the conversation to them. The partner might briefly acknowledge the event with short phrases but they appear disinterested in the response. These phrases are not intended to prolong the conversation. Instead, they appear to subtly bring the conversation to an early end. Key Element: lack of interest/self-focus.

After watching an interaction at least two times, coders selected the category that best represented a person's dominant response style throughout the interaction. They then rated the participants

on each of the four categories using a 6-point scale for how well each category captured their behavior, ranging from 0 (*absolutely no match*) to 5 (*very good match*). To increase independent ratings, coders only focused on one of the partners in each couple (never both). Inter-rater reliability was acceptable as determined by intraclass correlations (ICC) with absolute agreement of .89 for the active-constructive dimension ($M = 1.64$, $SD = 1.3$), .63 for the passive-constructive dimension ($M = 1.27$, $SD = 1.23$), .80 for the active-destructive dimension ($M = .85$, $SD = 1.2$), and .73 for the passive-destructive dimension ($M = .83$, $SD = 1.1$). All videos were double-coded by independent raters and their scores were aggregated to create four dimensions of capitalization responses for subsequent analyses. The observed differences between ICC estimates (e.g., passive-constructive dimension compared to active-constructive dimension) probably reflect the greater difficulty in assessing one response style relative to the other. Regardless, these inter-rater reliability estimates were generally high and certainly higher than most behavioral coding procedures (e.g., only 2 of 14 Specific Affect Coding System and 4 of 16 Behavioral Affective Rating Scale observations had ICC's greater than .70; Johnson, 2002) since our estimates came from the actual item-level data and not the mean scale data. Given that 85.4% of participants displayed at least some degree of match (>0) for more than one response style, we choose to analyze the four dimensions of capitalization responses rather than the dominant response style category. Our choice allowed us to take into account the possibility of a person providing multiple response styles within a given interaction for a better understanding of the nuanced ways in which participants provided support.

To assess the validity of this behavior coding system, we computed a composite score similar to PRCA procedures (active-constructive minus average of other categories) creating an overall measure of observer-rated capitalization with higher scores reflecting greater capitalization support. This measure significantly correlated with participant's self-rated provision of capitalization of support following the interaction ($r = .18$, $p = .008$), as well as partner's ratings of receipt of capitalization support ($r = .23$, $p = .002$) and partners' PRCA scores ($r = .31$, $p < .001$).

6-Month follow-up assessment

Participants were informed that they would be contacted by e-mail approximately 6 months from their participation in the study. All participants were contacted by e-mail with a link to complete an online survey which included questions about their relationship status (whether the relationship was intact), relationship satisfaction and commitment (Rusbult et al., 1998), and the Social Interaction Anxiety Scale (Mattick & Clarke, 1998). We obtained data from 299 participants (85.92% response rate), which included data from both partners for 125 couples.

Results

Preliminary analyses

Means, standard deviations, ranges, and alpha coefficients for basic measures prior to standardization are reported in Table 1. Participants' average social anxiety scores ($M = 17.58$; $SD = 11.33$) were similar to other large non-clinical samples (Heimberg et al., 1992; Mattick & Clarke, 1998); participants at 1.5 standard deviations above the mean in our sample had scores that approximate the cut-off for reliability differentiating people with and without diagnoses of social anxiety disorder (≥ 34.0 ; Brown et al., 1997). Using this score to reflect analogue social anxiety disorder, 19.5% of our couples ($n = 68$) had at least one person who scored in the

clinical range. We examined social anxiety, and personality and relationship processes, as continuous variables in analyses. With an interest in main and interaction effects, dimensional predictors were standardized to increase interpretability (Campbell & Kashy, 2002).

For our laboratory interaction, analyses focused on 157 couples, a subset of the initial sample with available behavioral data.¹ Couples with and without behavioral data were compared across ten demographic (e.g., age, length of relationship), predictor, and outcome variables. The only difference found was that couples without behavioral data described their partners as generally responding with greater capitalization support to positive event disclosures (PRCA), $t(250) = 2.09$, $p = .038$. As a manipulation check, we examined whether couples viewed the events being shared as positive using a 7-point scale from 1 (*extremely negative*) to 7 (*extremely positive*). In empty models (with no predictors), we conducted dyadic analyses on the valence of one's own event and the event shared by romantic partners, respectively. The average person viewed their own event as extremely positive, as evidenced by an intercept of 5.95 (95% Confidence Interval of 5.80–6.10), and viewed their partner's event as extremely positive, as evidenced by an intercept of 5.89 (95% Confidence Interval of 5.70–6.08). These data suggest that participants followed instructions and shared positive events to their romantic partners during the interaction. Of note, we found that people with greater social anxiety were more likely to diminish the importance of positive events. Compared to their less anxious peers, people with high social anxiety rated the positive event they shared as less important/meaningful ($r = -.12$, $p < .05$) and their partner's event as both less positive ($r = -.11$, $p < .05$) and less important/meaningful ($r = -.13$, $p < .05$). Social anxiety was not significantly related to observer ratings of the positivity of the event.

Analysis of dyadic data

To account for the non-independence of each person's data, we tested research questions with Actor-Partner Interdependence Models (APIM; Kenny et al., 2006). APIM analyses control for the effects of one partner's behavior when examining the effects of the other partner's behavior. This approach is a conservative test because a given predictor (e.g., social anxiety) can only reach statistical significance if it accounts for unique variances beyond the other predictor in the model (e.g., partner's social anxiety). We examined the within-person effect of how an individual's social anxiety contributes to his or her own relationship outcomes (i.e., the *actor effect*) and the between-person effect of how an individual's social anxiety contributes to their partner's relationship outcomes (i.e., the *partner effect*). All analyses involved multilevel modeling, conducted using HLM 6.08 (Raudenbush, Bryk, Cheong, & Congdon, 2000). To ensure that social anxiety effects were not the result of being in briefer romantic relationships, we included relationship length as a covariate in multilevel models. We also included gender as a main effect and moderator, to examine potential contextual constraints on how social anxiety operates.

Besides having data from both partners, we collected information on the directionality of capitalization support. When a person shares a positive event, they hope to receive capitalization support (receipt). When a person hears about a positive event from their partner, they may or may not provide capitalization support

¹ Seventeen couples did not have behavioral data for the following reasons: 10 couples had recording and audio errors preventing coding of the data, five couples failed to attend the second study session, one couple did not consent to being taped, and one couple broke up prior to the second study session.

(provision). These data allowed us to adopt an interpersonal perspective of social anxiety where we could explore dynamic exchanges with romantic partners (Coyne, 1999).

Indices of capitalization support and relationship quality: cross-sectional

We first sought to replicate prior work (e.g., Gable et al., 2004, 2006) showing that an active-constructive response style is associated with higher relationship well-being. We did this by examining whether our three indices of capitalization support (self-report, partner report, observations in laboratory interactions) were related to the quality of romantic relationships. The quality of romantic relationships was operationalized as satisfaction and commitment.

We found that when sharing positive events, people who viewed their partner as supportive (PRCA) reported greater relationship satisfaction, $\beta = .40$, $t = 4.85$, $p < .001$, and commitment, $\beta = .31$, $t = 3.75$, $p < .001$. We also found that people who believed they provided supportive responses to partners reported greater relationship satisfaction, $\beta = .35$, $t = 4.75$, $p < .001$, and commitment, $\beta = .35$, $t = 4.94$, $p < .001$. During the laboratory interaction, both members of romantic dyads reported on their receipt of capitalization support from their partner and their provision of capitalization support to their partner. People who felt that they received more capitalization support reported greater relationship satisfaction, $\beta = .37$, $t = 3.02$, $p = .003$, and commitment, $\beta = .35$, $t = 2.37$, $p = .019$, and people who felt that they provided their partner with more capitalization support reported greater relationship satisfaction, $\beta = .38$, $t = 2.36$, $p = .019$, but there was no significant association with commitment ($p = .21$). There were no statistically significant main or interactive effects for observer ratings of capitalization support dimensions in the laboratory, but people whose partners were rated as providing more support (composite score) reported marginally greater relationship satisfaction, $\beta = .20$, $t = 1.93$, $p = .054$. There was consistency across trait and state measures in the relational benefits of viewing one's partner or oneself as supportive or responsive to positive events.

Social anxiety symptoms and reported receipt and provision of support

We next examined whether social anxiety (Aim 1) was related to the receipt and provision of support following shared positive events. We expected socially anxious people to both perceive themselves and be rated by partners as less supportive when providing support and that they would receive less support from their partners when disclosing their positive event. We organized results around our three approaches for operationalizing capitalization support: (1) trait perceptions of capitalization support received from and provided to romantic partners, (2) observations of when capitalization support is made to romantic partners, and (3) state perceptions of capitalization support received from and provided to romantic partners during laboratory interactions.

Trait measures of capitalization support

As hypothesized, we found evidence that people with greater social anxiety would perceive themselves and be perceived by partners as being less supportive during positive event disclosures. Using a trait measure to capture how partners typically provide support to one another, we found an actor effect on received capitalization support (PRCA scale), $\beta = -.17$, $t = -2.61$, $p = .01$. Romantic partners rated people with greater social anxiety as less likely to provide supportive responses to shared positive events. We also found evidence for a partner effect on the provision of

capitalization support, $\beta = -.17$, $t = -2.92$, $p = .004$. People with greater social anxiety believed that they provided less supportive responses to their romantic partners. The only other significant effect found that women felt they provided more capitalization support, $\beta = .15$, $t = 2.89$, $p = .005$. Neither gender nor relationship length predicted or moderated any of the estimated effects.

Laboratory measures of capitalization support

In addition to examining general perceptions of support, we asked whether people with greater social anxiety behave differently during the sharing of positive events in a laboratory interaction. Our hypotheses remained the same, that people with greater social anxiety would provide and receive fewer supportive responses during positive event disclosures. We used independent observer ratings of capitalization support given to partners and post-interaction self- and partner-reports. For observer ratings, we included participants' ratings of the importance or meaningfulness of their shared events (rated on 7-point Likert scales) as covariates.

Behavioral observations. First, we examined how social anxiety related to observer ratings of capitalization support. We found that actor social anxiety was positively related to observer ratings of passive-constructive responding, $\beta = .21$, $t = 2.54$, $p = .01$. Thus, people who were more socially anxious were more likely to display a passive-constructive response style. We also found an Actor Social Anxiety \times Gender interaction on passive-destructive responding, $\beta = .20$, $t = 2.48$, $p = .01$. Upon examining simple slopes by using dummy codes for gender (Cohen, Cohen, West, & Aiken, 2003), we found that women with greater social anxiety exhibited more passive-destructive responses to their partners as rated by independent observers, $\beta = .20$, $t = 1.89$, $p = .06$, and men with greater social anxiety exhibited less passive-destructive responses to their partners, $\beta = -.18$, $t = -1.74$, $p = .08$. We failed to find significant main or interaction effects for model variables on observed active-constructive or active-destructive responding. Consistent with previous research (Gable et al., 2006), we then computed an overall observer-rated capitalization support score whereby higher scores reflected more active-constructive responding. We found no significant social anxiety effects using this composite score ($ps > .25$). However, higher social anxiety scores significantly predicted more response style categories coded above zero, $\beta = -.14$, $t = 2.15$, $p = .03$. This suggests that response behaviors of people with greater social anxiety were more likely to have elements that were both active and passive, and both constructive and destructive. Thus, a single score may not capture the maladaptive nature of responsiveness in this population.

Perceptions of capitalization support. Besides observational data, both members of romantic dyads reported on the receipt of capitalization support from their partner and their provision of capitalization support to their partner following the laboratory interaction. We expected that people with greater social anxiety would provide and receive fewer supportive responses during positive event disclosures. As hypothesized, people with greater social anxiety felt they received less capitalization support (actor effect), $\beta = -.18$, $t = -2.16$, $p = .03$ after sharing their positive event. Given the tendency of socially anxious people to diminish positive events, we checked to see whether their perceptions were "just in their head." We found evidence that socially anxious people accurately perceived their partners as their partners also acknowledged providing less capitalization support (partner effect), $\beta = -.17$, $t = -2.02$, $p = .04$. When socially anxious people were in the role of providing support to their partners, we found that their partners felt they received more capitalization support (partner effect), $\beta = .18$, $t = 2.05$, $p = .04$.

Summary. We found evidence that greater social anxiety is associated with dysfunctional capitalization support (receipt and

provision). When receiving support from partners, people with greater social anxiety felt they received less support from their partners and their partners also acknowledged providing less support following a laboratory task. When providing support, people with greater social anxiety viewed themselves as less likely to provide capitalization support and their romantic partners also rated them as less supportive. This was found for perceptions of support in daily life (trait scales). Following a laboratory interaction, independent observers found that people with greater social anxiety engaged in more passive-constructive responding; women with greater social anxiety engaged in more passive-destructive responding whereas men with greater social anxiety engaged in less passive-destructive responding. In contrast, partners of people with greater social anxiety felt an abundance of received capitalization support following a laboratory interaction, suggesting an asymmetry in how socially anxious partners behave or are perceived.

Longitudinal relationship outcomes

Of the 299 participants from which we obtained follow-up data, 250 people (83.6%) were in the same relationship 6 months later.² Analyses focused on our primary question: does the accumulated presence of capitalization support over the course of a romantic relationship help explain when social anxiety is related to relational problems (Aim 2)? Our inclusion of covariates, main effects, and moderation tests is illustrated by the predictors in our Level-1 Equation (ancillary analyses failed to find support for gender as a moderating variable, thus, these interactions are not included below):

$$y_{ij} = \beta_{0i} + \gamma_{01}(\text{Gender}) + \gamma_{02}(\text{Capitalization Support}) \\ + \gamma_{03}(\text{Actor Social Anxiety}) \\ + \gamma_{04}(\text{Partner Social Anxiety}) \\ + \gamma_{05}(\text{Actor} \times \text{Partner Social Anxiety Effect}) \\ + \gamma_{06}(\text{Actor Social Anxiety} \times \text{Capitalization Support}) \\ + \gamma_{07}(\text{Partner Social Anxiety} \times \text{Capitalization Support}) \\ + \gamma_{08}(\text{Actor Social Anxiety} \times \text{Partner Social Anxiety} \\ \times \text{Capitalization Support}) + \gamma_{09}(\text{Relationship Length}) \\ + r_{ij}$$

The laboratory measures of capitalization support only captured a single instance of capitalization support instead of general relationship behavior tendencies. Thus, to answer our research question, we conducted analyses using the global/trait measures of capitalization support receipt and provision. To address the specificity of our model, we also examined the reverse direction of whether capitalization support and relationship quality predicted changes in social anxiety symptoms over time.

Relationship stability

Relationship stability was operationalized as intact couples at the 6-month follow-up. To handle this dichotomous outcome variable, we used a series of non-linear (Bernoulli) multilevel models, often referred to as multilevel logistical regression. We found that baseline actor social anxiety was positively related to the likelihood that the relationship ended prior to the 6-month follow-up, $\beta = .35$,

$t = 2.44$, $p = .02$. We also found a Partner Social Anxiety \times PRCA interaction, $\beta = -.31$, $t = -2.82$, $p = .006$. Based on data analytic procedures for multilevel models (Bauer & Curran, 2005; Preacher, Curran, & Bauer, 2006), we examined simple slopes. When socially anxious people (+1 SD from the mean) were perceived by their partners as providing less capitalization support, the relationship was more likely to end, $t = 2.10$, $p = .04$, whereas for people with low social anxiety (–1 SD from the mean), partner perceptions of capitalization support had no association with break-up status, $t = 0.72$, $p = .47$. This suggests that in predicting relationship maintenance, the combination of being in a romantic relationship with a socially anxious person was insufficient to predict relationship longevity; break-ups only occurred when partners failed to receive adequate capitalization support.

Change in relationship quality

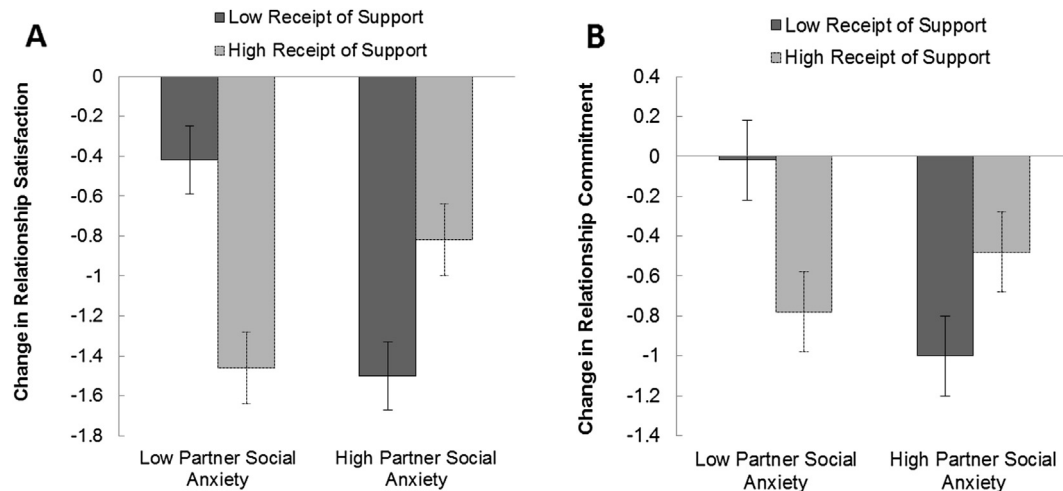
In these analyses, we focused on social anxiety and capitalization support as predictors of change in relationship satisfaction and commitment. The only difference from the Equation above was the use of difference scores (follow-up minus baseline) as outcome variables (Aim 2). As previously stated, we hypothesized that social anxiety would interfere with capitalization support, thereby initiating negative relational consequences.

Receipt of support. The following analyses focused on how the perceived receipt of support (PRCA) predicted changes in the quality of romantic relationships. We found that greater actor social anxiety predicted declining relationship satisfaction, $\beta = -.42$, $t = -2.56$, $p = .01$, and there were significant Partner Social Anxiety \times PRCA interactions for relationship satisfaction, $\beta = .43$, $t = 3.12$, $p = .003$, and commitment, $\beta = .32$, $t = 2.48$, $p = .01$. As shown in Fig. 1, partners of people with greater social anxiety reported greater declines in relationship satisfaction when they believed they were not receiving capitalization support (–1 SD from the mean), $\beta = -.54$, $t = -2.71$, $p = .007$; when people believed they were receiving capitalization support (+1 SD from the mean), there was no social anxiety effect, $p > .10$. Similarly, partners of people with greater social anxiety reported greater declines in relationship commitment when they believed they were not receiving capitalization support (–1 SD from the mean), $\beta = -.49$, $t = -3.04$, $p = .003$; when people believed they were receiving capitalization support (+1 SD from the mean), there was no social anxiety effect, $p > .10$.

Provision of support. The following analyses focused on how the perceived provision of capitalization support predicted changes in the quality of relationships. Mirroring findings on receiving support, we found Actor Social Anxiety \times Provision of Capitalization Support interactions for relationship satisfaction, $\beta = -.26$, $t = -2.24$, $p = .03$, and commitment, $\beta = -.23$, $t = -2.29$, $p = .02$. As shown in Fig. 2, people with low social anxiety reported a smaller decline in relationship satisfaction, $\beta = -.53$, $t = -3.05$, $p = .003$, when they perceived themselves to be supportive to their partners (+1 SD from the mean); when people believed they failed to provide capitalization support (–1 SD from the mean), there was no actor social anxiety effect on relationship satisfaction, $p > .10$. Similarly, people with low social anxiety reported a smaller decline in relationship commitment, $\beta = -.36$, $t = -2.45$, $p = .02$, when they believed they provided support (+1 SD from the mean), when people believed they failed to provide capitalization support (–1 SD from the mean), there was no actor social anxiety effect on relationship commitment, $p > .10$.

An additional finding is that for people with high social anxiety, high provision of support was associated with greater declines in relationship commitment, $\beta = -.36$, $t = -2.45$, $p = .02$ (Fig. 2B), but the amount of support provided was not significantly related to relationship satisfaction, $\beta = -.06$, $t = -0.32$, $p = .75$ (Fig. 2B). These findings suggest that engaging in healthy relationship behavior

² Of the 49 participants excluded from the analyses, there were twelve couples who did not provide any follow-up data ($n = 24$) and 25 couples from which data was obtained from only one partner ($n = 25$).



Notes. Receipt of support was based on self-report and thus indicates perceptions. To ease interpretation, outcome variables reflected difference scores, subtracting baseline from 6-month follow-up assessments.

Fig. 1. Interactive effect of a partner's social anxiety symptoms and perceptions of received capitalization support on changes in relationship quality (over 6 months).

does not necessarily translate into improvement in the quality of the relationship.

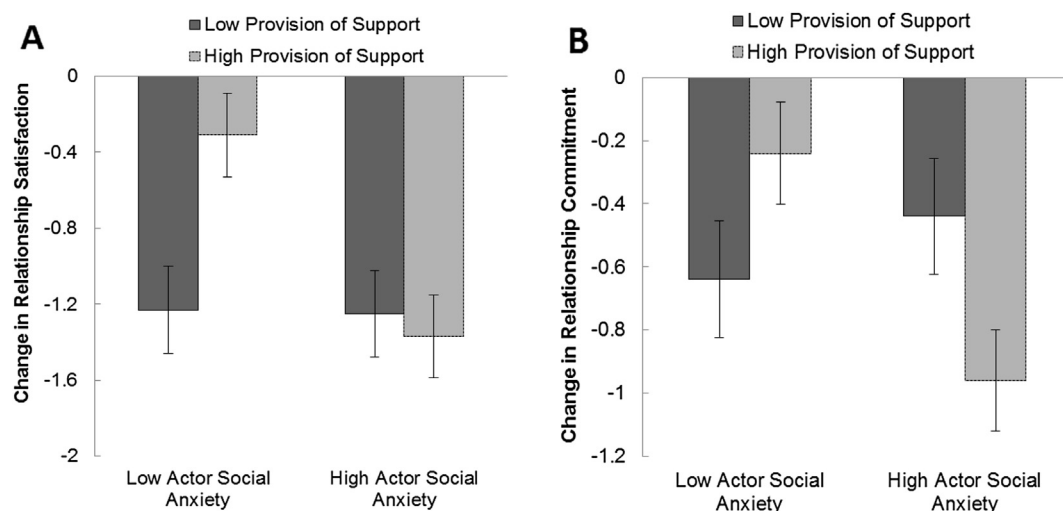
Reverse directional model: predicting change in social anxiety

We tested a reverse causal model with capitalization responses and romantic relationship quality as predictors of change in social anxiety from baseline to 6-month follow-up. Our measures of capitalization support and relationship quality failed to significantly predict changes in social anxiety ($ps > .10$). Thus, our longitudinal models significantly operated in only one direction.

Construct specificity

We wanted to ensure that the effect of social anxiety on capitalization support could not be attributable to the related construct of depressive symptoms. To test this, we conducted APIM analyses

with individual differences in depressive symptoms as a covariate; in prior tests, we already showed that effects could not be attributable to gender or the length of romantic relationships. Due to concerns about multicollinearity, these tests should be considered stringent. First, we focused on whether social anxiety retained associations with capitalization support. Controlling for depressive symptoms, social anxiety effects on trait measures of capitalization support remained statistically significant. In predicting laboratory measures, the Social Anxiety \times Gender interaction effect on observer ratings of passive-destructive responding and state self-report measure of capitalization support during the interaction remained significant; however, social anxiety was no longer significantly related to observer ratings of passive-constructive responding ($p > .25$). In contrast, depressive symptoms failed to have a significant effect on any trait, observer, or laboratory state measure of capitalization support after controlling for social anxiety



Notes. Provision of support was based on self-report and thus indicates perceptions. To ease interpretation, outcome variables reflected difference scores, subtracting baseline from 6-month follow-up assessments.

Fig. 2. Interactive effect of social anxiety symptoms and perceptions of provided capitalization support on changes in relationship quality (over 6 months).

(all $ps > .25$). Second, we focused on whether social anxiety and capitalization support continued to be associated with longitudinal relationship outcomes. Controlling for depressive symptoms, interactions between social anxiety and capitalization support on longitudinal changes in relationship stability, satisfaction, and commitment remained statistically significant (notably, the Actor Social Anxiety \times Provision of Capitalization Support interaction for relationship satisfaction became a trend at $p = .05$). There was one exception: actor social anxiety was no longer significantly related to the likelihood that the relationship ended ($p = .92$). In contrast, depressive symptoms failed to have any significant effects after controlling for social anxiety (all $ps > .20$). In summary, we felt fairly confident that the effects of social anxiety on indices of capitalization support, and the synergy between social anxiety and capitalization support on longitudinal relationship outcomes were robust and not confounded with depressive symptoms such that for 13 of 14 tests social anxiety effects remained and for 14 of 14 tests there was no evidence for depressive symptom effects.

Discussion

In the context of romantic relationships, social anxiety was related to the provision and receipt of support when sharing positive events. In a laboratory interaction, socially anxious people believed that they received less supportive responses when they shared positive events to partners and in turn, partners acknowledged providing less capitalization support. When asked how they typically provide capitalization support in daily life (i.e., trait scales), socially anxious people viewed themselves, and were viewed by their partners, as unenthusiastic and disinterested following partner disclosures of positive events. This lack of provision of capitalization support was visible to independent observers such that socially anxious individuals were viewed as unenthusiastic and non-expressive of positive emotions during laboratory interaction. These findings extend work linking social anxiety to the suppression of both negative and positive emotions (e.g., Erwin, Heimberg, Schneier, & Liebowitz, 2003; Turk et al., 2005). However, an unexpected finding emerged where the partners of people with greater social anxiety felt an abundance of received capitalization support following a laboratory interaction. This suggests an asymmetry in how socially anxious people are perceived by their partners in different contexts—they are viewed as being less supportive in everyday life but as more supportive during the laboratory task. While this finding may reflect method variance, we speculate that partners of socially anxious people consider context when assessing their partner's behavior, such that lesser demands are placed on and expected from them in public social situations (such as a laboratory experiment where partners are being videotaped) compared to a more private environment.

In prior work, the provision and receipt of capitalization support has been shown to strengthen existing relationships by providing signals that events indicative of happiness and personal growth are valued by partners (Gable et al., 2004, 2006; Reis et al., 2010). Perceiving partners as providers of capitalization support has been strongly associated with greater relationship satisfaction, intimacy, love, and commitment. We replicated these findings with converging lines of evidence that the receipt and provision of capitalization support, as general tendencies in relationships (trait) and during a laboratory interaction (state), were associated with greater relationship satisfaction and commitment. Observer ratings of capitalization support in the laboratory were not significantly related to relational outcomes. This laboratory assessment of capitalization only captured a single instance of support (in an artificial setting) which may have differed from general relationship behavioral tendencies (in the real-world). It is also possible that capitalization

attempts are only beneficial when these behaviors are perceived as supportive through the interpretative lens of the individual, thus highlighting the importance of perception over observed data.

To extend the main effects of capitalization support on relational outcomes, we examined social anxiety as a moderator of the longitudinal influence of capitalization support on relationship stability and quality. Across a 6-month period, we found a few straightforward findings. Compared to less anxious peers, socially anxious people experienced a higher likelihood of break-up and greater declines in relationship satisfaction. Relationship break-ups were more likely when individuals felt they were receiving inadequate capitalization support from a socially anxious partner (i.e., moderation model). Similarly, when the benefits of being in a romantic relationship with a socially anxious person were minimal, in terms of received capitalization support, partners experienced reductions in satisfaction and commitment over a 6-month period. Thus, to understand the longevity of romantic relationships, it was insufficient to focus on the presence of inadequate capitalization support or high social anxiety alone.

Our results fit with theories suggesting that upon recognizing an inability to be rewarded in a relationship, individuals manage distress by strategically distancing themselves from their partner (e.g., Canary & Stafford, 1992; Murray, Holmes, & Collins, 2006). The reasons for remaining in a dysfunctional relationship can vary, and the strategies for regulating the day-to-day predicament of having unmet needs vary as well. Distancing strategies to manage unsatisfying relationships include devaluing partner attributes and the overall relationship, disclosing less often, withholding the pursuit and provision of support, and seeking alternative sources of rewards and belonging (Alden & Taylor, 2004; Murray, Holmes, & Griffin, 1996). This framework might explain how despite being generous with the provision of capitalization support, socially anxious people become less committed to their relationship partner over time. A reduction in commitment might be a self-protective strategy that reduces anxiety in the short-term but backfires in terms of increasing the probability of relationship problems and termination. That is, the self-protective strategies of socially anxious individuals might render seemingly positive behaviors (such as the generous provision of support) inert and even maladaptive.

In addition to distancing, romantic partners who are not getting their needs met might become sensitive to their low return on investment. However, developing a tendency to regularly tabulate costs and benefits is a precarious relationship context compared to devoting attention to shared resources, goals, and values as this can lessen commitment to the relationship (e.g., Aron & Aron, 1997; Stafford & Canary, 2006). Researchers can extend the current work with a comprehensive analysis of the usefulness of different distancing and relationship maintenance strategies, and how social anxiety moderates their use, costs, and benefits.

One of the benefits of being in a romantic relationship is the opportunity to engage in supportive acts to self-selected partners. Supportive, kind actions have been shown to be a reliable source of positive emotions and other facets of well-being (Lyubomirsky, Sheldon, & Schkade, 2005). There is evidence that providing support and kindness to others provide benefits that often exceed the beneficiary of these acts (Schwartz, Meisenhelder, Ma, & Reed, 2003; Weinstein & Ryan, 2010). Upon exploring this in a romantic relationship context, we found that less anxious people who viewed themselves as providing support to partners' capitalization attempts reported the greatest maintenance of relationship satisfaction and commitment over time. The benefits of providing capitalization support to romantic partners failed to translate into discernible benefits for socially anxious people.

All of the work to date on social anxiety and reward responsiveness has focused on actors (Kashdan, 2007; Kashdan, Adams,

et al., 2011; Kashdan, Weeks, et al., 2011). The current results provide evidence that the positivity deficits linked to social anxiety extend to people in their social network—partners. By simultaneously examining the perspectives of both members of a couple, we could discern when deficits occur. Future work can explore the conditions enabling a socially anxious individual to generate a reliable sense of belonging, competence, meaning, autonomy, and joy in a romantic relationship (for them and their partner) (e.g., Fincham & Beach, 2010; LaGuardia, Ryan, Couchman, & Deci, 2000).

Our findings suggest that social anxiety and both elements of capitalization support—receipt and provision—operate together to understand romantic relationships. Socially anxious people are in a particularly vulnerable situation by failing to recognize, receive, and/or provide positive behaviors that are consistently linked to flourishing relationships. What remains to be understood is how socially anxious people select and shape their social environment, for instance, non-assortive mating and avoidance regulatory strategies (e.g., fear of expressing positive emotions and events to partners; Turk et al., 2005). Our findings also suggest that failing to consider the mental health of romantic partners hinders an understanding of interpersonal processes such as capitalization support. In this study, we focused on existing romantic relationships but future work is needed on how social anxiety influences the initiation or failure to initiate romantic relationships. New methodologies such as speed-dating paradigms (Finkel & Eastwick, 2008) can provide insight into what socially anxious people do that sabotages the onset of romance.

Clinical relevance

Existing research provides strong evidence that social anxiety is best conceptualized as a dimensional construct, and definitions of clinically significant severity are arbitrary (e.g., Kollman, Brown, Liverant, & Hofmann, 2006; Ruscio, 2010; Weeks, Carleton, Asmundson, McCabe, & Antony, 2010). Our research can thus be viewed as further interpersonal approaches to social anxiety and social anxiety disorder. We explored the correlates and consequences of social anxiety within a romantic relationship context, something that has been largely neglected (Heimberg et al., 2010; Hofmann, 2007). We found that collecting information from only one member of a romantic partner would lead to several omissions and erroneous conclusions concerning the consequences of being a socially anxious romantic partner or having a socially anxious partner.

It has been 28 years since researchers had an individual suffering from an anxiety disorder enter into treatment with his or her romantic partner (Barlow, O'Brien, & Last, 1984). Theorists with an interpersonal approach to psychopathology emphasize that relationships are at the core of the etiology, phenomenology, and maintenance of a seemingly intrapersonal condition. There is no condition that seems riper for an interpersonal treatment than social anxiety disorder (Alden & Taylor, 2004). Existing clinical trials of interpersonal therapy (e.g., Lipsitz et al., 2008; Strangier, Schramm, Heidenreich, Berger, & Clark, 2011) have found that this treatment modality is equivalent or slightly inferior to classical cognitive-behavioral interventions (CBT). Alden and Taylor (2011) found that classical cognitive-behavioral interventions can be enhanced by attempts to directly manipulate the interpersonal patterns of clients from rigid, cold, and submissive behaviors to an ability to flexibly adapt to changing situational demands (Kashdan & Rottenberg, 2010). We believe that clients suffering from social anxiety who happen to be in a stable romantic relationship might comprise a subgroup that benefits more from a cognitive-behavioral format that incorporates knowledge from relationship science. Targets can include the identification of capitalization support opportunities and helping in interpreting the social

exchange accurately. Our findings suggest that socially anxious people provide and receive less support in positive event contexts as rated by self, partner, and trained observers. Thus, people with greater social anxiety and their partners may especially benefit from relational techniques aimed at establishing and enhancing positive support behaviors, such as training to allocate attention to positive stimuli (Taylor, Bomyea, & Nader, 2011) and cognitively restructuring fears of positive evaluation (Fergus et al., 2009). Additionally, the romantic partners of clients with social anxiety in treatment help sculpt the social environment, which includes personal and relational goals. Partners attuned to the interpersonal dynamics between them and the client can increase the treatment dose at minimal cost. The present research serves as an initial platform to study the healthy relationship behaviors that are potentially neutralized by social anxiety, whether it is the actor, the partner, or the interaction between them.

Study strengths and limitations

Our findings confirm prior theories of positivity deficits (Kashdan, Weeks, et al., 2011) and interpersonal dysfunction (Alden & Taylor, 2004) associated with social anxiety. Despite a handful of studies on social anxiety and close relationships, almost nothing is known about how socially anxious people and their romantic partners influence each other to predict relationship functioning. As a novel contribution, we addressed the dynamic interplay between social anxiety and partner levels of social anxiety and how they influence perceptions of self, perceptions of partner, observed social behavior, relationship stability, and perceptions of satisfaction in and commitment to the existing relationship.

There were several strengths to our study. First, the large number of our couples in the study reduced the likelihood of spurious findings. Second, to address methodological limitations in prior research, we captured the behaviors and perspectives of both partners within a couple, and obtained six month follow-up data to examine how social anxiety and capitalization support predict changes in relational outcomes. Importantly, we found that social anxiety had virtually no association with cross-sectional or longitudinal changes in relationship satisfaction and commitment. It was only through simultaneous examinations of actor and partner effects for social anxiety and capitalization support did we find uncover conditions underlying healthy and unhealthy relationships. Third, with the use of three methodologies to assess capitalization support (self-ratings, partner ratings, observers coding interactions), we found relatively consistent findings. The only deviation was observer ratings of behavior, where we found that social anxiety was positively related to two of three forms of dysfunctional capitalization support (passive-constructive and for women, passive-destructive). Fourth, the romantic couples studied showed a high level of homogeneity on background variables including relationship length, education, and socioeconomic status, thus reducing error variance (albeit at the expense of generalizability). Fifth, we addressed gender main and interactive effects in our models. Prior researchers have shown that gender influences the severity of social anxiety, willingness to disclose personal information, and appreciation of intangible support given by other people (e.g., Turk et al., 1998). In this study, gender had a negligible role in influencing social anxiety or capitalization support, with the exception that socially anxious women were observed to be more passive-destructive in the laboratory interaction whereas socially men were observed to be less passive-destructive. Sixth, we found evidence that our social anxiety findings could not be accounted for by shared variance with depressive symptoms; in contrast, depressive symptoms failed to show significant associations with indices of capitalization support.

Despite these strengths, several caveats should be considered. First, we created our own measure of provision of capitalization support rather than adapting the PRCA (measuring the receipt of support). Our newly created measure captures the internal benefits of providing support (e.g., “Hearing about/responding to good things that happen to my partner makes me feel alive”) whereas the PRCA is limited to the actions of partners. Despite this difference, both measures demonstrated validity as evidenced by correlations with relational outcomes and both were inversely related to social anxiety. Thus, using two different approaches to capture capitalization might lend greater support to the robustness of the capitalization construct as being relevant to how socially anxious people experience, act, and benefit from romantic relationships. Second, although the longitudinal component of our study offers an improvement over cross-sectional work, any conclusions about causality must be speculative without cross-lagged analyses. That said, we found no evidence that romantic relationship quality predicted changes in social anxiety (reverse direction). Third, our recruitment of couples was limited to a college sample selected for social anxiety levels. Notably, 19.5% of our couples had a member who scored in the clinical range of social anxiety (Brown et al., 1997). Our sample showed acceptable racial, ethnic, and age diversity. Nonetheless, findings might not generalize and thus require replication using community and clinical samples.

Several studies have shown that the positivity deficits linked to social anxiety can be improved via training to allocate attention to positive stimuli (Taylor et al., 2011), pursue approach- instead of avoidance-oriented social goals (Alden & Taylor, 2011), and cognitively restructure fears of positive evaluation (Fergus et al., 2009). These studies offer promise that the interpersonal biases and relationship difficulties associated with social anxiety might be ameliorated with existing interventions. Future work can address the benefits of conducting interventions that explicitly involve an individual with social anxiety difficulties and their romantic partner, as we found dysfunctional patterns resulting from the interplay of one person influencing another.

Conclusion

Each partner in a romantic relationship yields a unique repertoire of cognitive, emotional, and behavioral responses that are influenced by individual differences such as social anxiety. Neglecting individual differences can lead to erroneous conclusions about how and when capitalization support is linked to healthy relationship outcomes. The addition of capitalization support to the social anxiety literature offers new insights into an interpersonal approach to psychopathology; the addition of social anxiety to the capitalization support literature offers new insights into a contextual perspective of relationships. The next step is to examine the stability of these contextual findings and whether a socially anxious person with inadequate capitalization support skills is at a disadvantage for forming and maintaining romantic relationships as well as other close relationships.

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